Golder Associates
Consulting Engineers

TRANSMITTAL LETTER

To Environmental Protection Agency Region 10
1200 Sixth Avenue
Seattle, Washington 98101

Date October 11, 1991
Project No. 913-1101.101

ATTENTION: Mr. Timothy Brincefield

Sent by David Banton

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Quantity	Item	Description
1	Response to Comments	Remedial Investigation/Feasibility Study Work Plan cc: D. Wilson P. Hyland S. Krchma D. Hrebenyk B. Roberts M. Thomas R. Geddes
Remarks		

Per D. Banton/ah

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RESPONSE TO EPA COMMENTS, RECEIVED SEPTEMBER 18, 1991,
ON THE DISPOSITIONS TO INITIAL COMMENTS
ON THE DRAFT PHASE I RI/FS WORK PLAN
FOR THE MONSANTO COMPANY SODA SPRINGS ELEMENTAL PHOSPHORUS PLANT

INITIAL GENERAL COMMENT

Comment

The substantial issues summarized in the general comments section of the EPA comment letter dated June 10, 1991 have not been adequately addressed. The guidance presented in the letter regarding data objectives and activities, preliminary remedial action objectives, preliminary general response actions and technologies, identification of chemical- and location-specific ARARs, and project scheduling were not applied toward the requested revisions.

Monsanto and their contractor Golder Associates Inc., continue to rely on one generalized objective for each RI/FS task with vague statements that all available data compiled will be evaluated, and/or the purpose of the data is to support subsequent RI/FS activities. There are very few specific objectives regarding how the data is to be evaluated or what the data is to be evaluated for. It is unclear how data from one task such as meteorology (Task 5), will be combined with other tasks such as soils (Task 4), or source investigation (Task 8) to achieve unstated objectives such as "To determine the nature and extent of contamination from wind-borne emissions or releases on environmental media including potential biological receptors." Nor does the revised work plan provide any approach as to how this objective may be accomplished.

Based on the existing general task objectives, it appears that each task will be evaluated and summarized in and of itself, with very few goals or objectives linking the task information for specific evaluations regarding potential release mechanisms, exposure pathways, and refinements to the conceptual model.

Response

This comment addresses several concerns which are responded to separately:

- Activity objectives — Further details on activity objectives will be incorporated into the next version of the work plan.

- Preliminary general response actions and technologies — Such actions and technologies will be incorporated into the next version of the work plan. Under the current concept of perceiving a site-specific need for up-to-date ground water quality data prior to developing a Phase I RI or FS report, such actions and technologies will be identified on only a very broad and general basis.

- Identification of chemical- and location-specific ARARs — Chemical-specific ARARs are preliminarily identified in Table 4. No location-specific ARARs have been identified (see Subsection 3.3.4), but the table of potential location-specific ARARs, provided among EPA's previous set of comments, will be incorporated into the next version of the work plan as a table. Phase I RI Task 9 (see Subsection 6.1.9) will be modified to indicate that the new table will be reevaluated during the course of the project to verify the status of location-specific ARARs.

- Project scheduling — The project schedule has been revised to conduct as many activities as practicable in a concurrently phased manner. The objective of restructuring the schedule in this manner will be to reduce the overall time frame of the project.

INITIAL SPECIFIC COMMENTS

Comment 1

The approach presented by Monsanto and their contractors, Golder Associates Inc., may have been agreed to in principal, but not in substance, since there was not a clear demonstration that the guidance provided in the June 10th letter and subsequent meeting on June 20th has been applied toward revision of the document.

Response

Acknowledged.

Comment 2

It was stated that an "evaluation of the usability of this historical data must be done during scoping and within the context of developing the RI/FS Work Plan." The intent of this comment was not to comprehensively evaluate the data but rather to determine how usability of historical data will be approached.

The last sentence in Monsanto's response letter stated that "EPA recommends compilation of existing data as the primary data collection method for the site characterization phase of an RI." While this may be true, if data gaps are known t exist, then activities beyond existing data collection must be pursued on a parallel path so as not to unduly delay the phased approach.

Response

Accepted. An approach to evaluate historical data usability will be incorporated into Project Management Task 5, Quality Assurance (see Section 5.5). (Note: Actual details of the task may be more appropriately described in the QAPP; if such is the case, however, Task 5 text will reference the details presented in the QAPP.)

Comments 3 – 7	**Adequate response given.**
Response	Acknowledged.
Comment 8	**It was mentioned that "the landfills will be characterized indirectly via the groundwater medium." This appears to be an RI/FS objective. Specifics should be provided as to how this will be accomplished.**
Response	Further details will be added to the activity objectives segments of Sub-subsections 6.1.7.2 and 6.1.7.3, Sampling and Analysis of Wells and Springs and Hydrogeological Data Evaluation, respectively. In addition, BOD and COD will be added to the list of analytes. These parameters will be used as landfill leachate indicators, and wells located downgradient from landfills (to be listed in the sampling location and analyses segment of Sub-subsection 6.1.7.2) will be evaluated to determine whether or not any landfill impacts to water quality are evident. In addition, Activity 8a (Sub-subsection 6.1.8.1, Source Data Compilation) will be expanded to include an evaluation of the current landfilled waste stream at the plant. This permitted waste stream is similar to the waste streams landfilled in other locations at the plant. A brief rationale for this overall approach to landfill investigation will be provided in this sub-subsection, as well.
Comment 9	**Adequate response given.**
Response	Acknowledged.
Comment 10	**Minimal information added but should be adequate for now.**
Response	Acknowledged.
Comment 11	**Adequate response given.**
Response	Acknowledged.
Comment 12	**The two questions within EPA's comments were not addressed - 1. "What were the sizes and locations of the PCB transformers; 2. Was any sampling for PCB's (other than the EPA inspection) conducted in the areas where the transformers were located. A determination regarding this issue should be done after review of the inspection findings.**

Response	Accepted. Monsanto maintains a PCB compliance file at the plant. The history of the plant compliance program will be summarized in Section 2.3 and the file cited within the text. The EPA-10 Superfund project manager will be provided with a copy of this file. Monsanto also received a Notice of Case Closure on the plant PCB issue that was transmitted by EPA-10 on September 25, 1991. This letter will also be summarized and cited in the next version of the work plan.
Comments 13 – 16	**Adequate response given.**
Response	Acknowledged.
Comment 17	**This response is not wholly satisfactory. While we understand that the site operations are firmly based on obtaining products which are inorganic materials, some simple organic screening should be included at a few key wells, if only to provide better current data and establish that there is no reason to further pursue this issue.**
Response	Accepted. Total petroleum hydrocarbons (TPH) will be added as a constituent of interest. This parameter will be analyzed for in one of the production wells and in some shallow wells located in the downgradient vicinity of landfill locations. Specific well locations will be noted in Sub-subsection 6.1.7.2, Sampling and Analysis of Wells and Springs.
Comments 18 – 21	**Adequate response given.**
Response	Acknowledged.
Comment 22	**Since Monsanto was not in compliance with the Clean Air Act and the State of Idaho air regulations, a specific objective of the RI should be to evaluate the potential impacts of historical emissions on environmental media, as previously stated in the letter of June 10th. This specific objective is not addressed in the Task 5 investigation, and must be included in the revisions.**
Response	Accepted. Monsanto will evaluate potential impacts of historical air emissions. Task 5 (Subsection 6.1.5) will be modified to make this clear.

It must be noted that Monsanto has always complied with Idaho and federal toxics air emissions regulations. To clarify this, the last sentence of the first paragraph of Subsection 3.2.3 will be modified to read: ". . . and has undertaken significant emissions control measures over the past decade in order to maintain compliance with evolving air quality regulations."

Comment 23 **There was no acknowledgement as to how air quality data will be evaluated for its usability, but rather just a statement that air quality will be encompassed within the meaning of meteorology. Specific objectives and activities regarding data usability must be presented in the revised version.**

Response Accepted. See the response to Initial Comment 2 above.

Comment 24 **Adequate response given.**

Response Acknowledged.

Comment 25 **Adequate response given.**

Response Acknowledged.

Comment 26 **Perry's memo may support the hypothesis, however, how will information from Task 3 (Soda Creek Sampling) be incorporated with Task 6 to test the hypothesis. A description of a plan of action to evaluate this issue must be provided in the revised work plan.**

Response Accepted. Phase I RI Task 3 (Surface Hydrological Investigation, Subsection 6.1.3, specifically Sub-subsection 6.1.3.2, Effluent, Surface Water, and Sediment Sampling) will be expanded to indicate that the investigation is being undertaken to test our hypothesis of a lack of impact to Soda Creek attributable to the permitted plant discharge.

Comment 27 **Adequate response given.**

Response Acknowledged.

Comment 28 **Work plan objectives (tasks) to assess potential soil pathways and exposure points have not been developed as previously requested. Furthermore, Figure 17 does not show soil as a transport media that could lead to exposure via direct contact or ingestion by human and environmental receptors. The Figure must be revised to include the items as shown in Attachment A. These issues must be addressed in the revised work plan.**

Response — Accepted. Figure 17 will be modified to incorporate EPA's concerns. This will be done by (1) drawing an arrow from the air transport medium to the soil secondary source, and (2) drawing an arrow from the soil secondary source to the direct contact exposure route. The corresponding text in Subsection 3.3.2, third paragraph, will be modified to include deposition of fugitive dust on off-plant soils.

Comment 29 — **Hypotheses are usually tested with specific actions rather than simply evaluations. The revised work plan must include objectives and tasks as to how the air pathways significance will be evaluated.**

Response — Accepted. Further details on the methodology to be used in testing the hypothesis in question will be presented in Subsection 6.1.5, Task 5 — Meteorological Investigation. We intend to employ EPA-endorsed dispersion models on stack emissions data and EPA-endorsed fugitive dust emissions estimates. The latter are to be derived from the implementation of Activity 8b, Sampling of Waste Piles for Fugitive Dust Emissions. The objectives statement for Activity 8b (Sub-subsection 6.1.8.2) will also be modified to further describe our intentions.

Comment 30 — **Adequate response given.**

Response — Acknowledged.

Comment 31 — **Adequate response given.**

Response — Acknowledged.

Comment 32-1 — **Only one small statement addressing background is found in activity objective 6.1.7.2, however, this should be adequate.**

Response — Acknowledged.

Comment 32-2 — **The beryllium detections found in samples from Appendix C indicate that this element should be excluded in future analyses. Some of the detections exceed risk-based values, even tough they may be natural background values. It is recommended that antimony and thallium not be included in the sampling analyses since all prior data indicate concentrations are below detection limits and below riskbased levels.**

Response — Accepted. Beryllium will be added to as a constituent of potential concern.

Comment 33	**Included in the June 10th letter was a list of potential location-specific ARARs that could be used to help screen those that may or may not be germane to the Monsanto site area. The revised work plan must provide a description as to how the hypothesis will be tested.**
Response	Accepted. EPA's list of potential location-specific ARARs, as provided in their initial comment letter of June 10, will be added as a table and referenced in Subsection 3.3.4 as some of the location-specific environmental standards, requirements, criteria, and limitations considered in the identification process. This new table will also be referenced, in Subsection 6.1.9, as something to reconsider in location-specific ARARs verification task.
Comments 34 – 38	**Adequate response given.**
Response	Acknowledged.
Comment 39	**It was stated that the general objectives would be enhanced through use of appropriate guidelines provided in the references cited by the reviewer. The additional guidance provided in the June 10th letter was not adequately incorporated. Monsanto and their contractor, Golder Associates Inc., must demonstrate application of guidance materials to this site.**
Response	Accepted. The activity descriptions within Chapter 6 will be elaborated upon, incorporating levels of detail provided in EPA RI/FS guidance and tables provided by EPA in their initial comment letter of June 10.
Comment 40	**The data needs summary provided in the June 10th letter was not applied in Chapter 6. Section 3.4 (Summary of Data Needs) provides a generalized basis for developing more specific objectives and activities in Chapter 6. The revised work plan must include more specific objectives and activities that will clarify how data will be evaluated, what approaches will be used, and the rationale.**
Response	Accepted. This request will be addressed in conjunction with the request made in Initial Comment 39 above. In elaborating on objectives, as noted in the response to Comment 39, implicit reference will be made to the data gap(s) driving the objective. In addition, it may be more appropriate to move the contents of Section 3.4, Summary of Data Needs, (i.e., data gaps) to Section 4.2, Work Plan Approach.

Comment 41 **With the exception of the Site Characterization deliverable and the Remedial Alternatives memo, decision points have not been identified.**

Response Accepted. A generalized discussion of later project decision points will be added to Sections 7.1 and 7.2.

Comment 42 **The history regarding past emissions and effects (elevated constituent concentrations in soils, plants, and livestock) indicate a need to collect current data, at least regarding soils. The regional soil sampling conducted by Severson and Gough in the Soda Springs vicinity in May 1975, consisted of 13 soil samples within 64 Km of the site, of which only 2 samples were collected 2 Km from the site. This limited historical data does not adequately address soil quality in the near vicinity of the operating plant today. Therefore, a soil sampling plan combined with a fugitive dust emission source sampling plan is required. The surface soil activity discussed in Attachment B must be incorporated into the revised work plan.**

Response Accepted. In addition to the fugitive dust emissions sampling program for the source areas at the plant, a just-outside-the-fenceline surface soil sampling program along the lines of that laid out by EPA-10 in Attachment B to the second work plan comment letter, received September 19, 1991.

In accordance with agreements made at a Monsanto/EPA-10 meeting held in Redmond on October 2, the three control samples (along with Kerr-McGee's three control samples) will be selected by Monsanto, Kerr-McGee, and EPA-10 representatives later this month in the field. The control samples will be located in similar soil types found near the two plants (local SCS officials will be consulted) and far enough from the plants (perhaps 16 — 32 km) so that any past contributions from the plants to the control soils will be negligible. A tolerance limit evaluation of control conditions will be used to eliminate substances that are present at naturally occurring concentrations or levels attributable to non-plant-specific anthropogenic activities (e.g., automobile exhaust, fertilizer application).

It was further agreed that an exceedance of control conditions must be regarded as merely an initial step in arriving at an eventual final determination of accountability for elevated levels of a given substance. Further Phase II investigations (e.g., spatial designs such as those conducted in the past by USGS) may be needed to pinpoint the actual source of any such exceedances.

Comment 43	**The intent of our comment was to insert the word "preliminary" in front of the tasks. (i.e., Development of preliminary remedial action objectives, preliminary general response actions, etc.). This would be consistent with the proposed deliverable entitled "Remedial Alternatives Development and Preliminary Screening Memorandum".**
Response	Accepted. The word "preliminary" will be added to each of the Phase I FS tasks, with the exception of "Reevaluation of data needs," listed in Sections 4.2 and 6.2.
Comments 44 – 48	**Adequate response given. However, for Comment 46, please note that EPA was not intended to suggest that the procedure was inadequate, but rather was a request that Monsanto use as some of their control points features which EPA can locate on existing photos of the site.**
Response	Acknowledged and, with regard to Comment 46, accepted. Under the task description segment of Task 1 — Geodetic Control (Subsection 6.1.1) mention will be made of locating some of the control points at readily recognizable features.
Comment 49	**This response is generally adequate, although it appears to EPA that sediment samples should be taken from points above, at and below the effluent discharge, and analyzed for priority pollutants. The Creek and associated wetland could also be walked and survey by a qualified aquatic ecologist, with special attention to biota and water quality indicators above and below the discharge.**
Response	Accepted as modified in EPA-10's letter of September 25. However, only T.3 parameters (exclusive of radiological parameters other than U) will be analyzed. This is consistent with agreements made on the soil issue at the October 2 meeting.
Comment 50	**It was stated that "a surface soil and fugitive-dust-emission source sampling program will be added for the final work plan." Since a surface soil sampling program was not added, direction has been given to do so under Comment # 42.** **Objectives and activities describing how the soil vadose zone will be indirectly assessed via the hydrogeological investigation must be included in the revisions.**
Response	See the response to Initial Comment 42 above.
Comment 51	**Adequate response given.**

Response	Acknowledged.
Comment 52	**It is mentioned that "one of the objectives for the ecological data compilation will be to identify any critical or sensitive habitats in the project vicinity." Please identify what other specific objectives for the ecological data compilation are.**
Response	Accepted. Further details on the objectives for the ecological data compilation activity will be provided in the next version of the work plan.
Comments 53 – 57	**Adequate response given.**
Response	Acknowledged.
Comment 58	**Specific objectives were not identified, nor were guidance materials incorporated. Provide additional objectives for target source areas and considerations to be used in the proposed evaluation process.**
Response	Accepted. Further details on subobjectives for the Source Data Compilation activity (see Sub-subsection 6.1.8.1) will be provided, along with a list of target areas at the plant. In addition, a list of factors to be used in the evaluation of such information will be added to the Source Data Evaluation activity (Sub-subsection 6.1.8.3 [currently numbered 6.1.8.2]).
Comment 59	**Considered adequate as an advisory comment.**
Response	Acknowledged.
Comment 60	**Location-specific ARARs have not been preliminarily identified, as apparently none were found. The list provided in the June 10th letter should be incorporated into the work plan to represent the site area.**
Response	Accepted. At this time, no location-specific ARARs have been found to be germane to the site (see Subsection 3.3.4), but the table of potential location-specific ARARs, provided among EPA's previous set of comments, will be incorporated into the next version of the work plan as a table representing potential ARARs that were considered during the identification process, and that will be further considered, as appropriate, during the verification process.

Comments 61 – 71	**The response to these comments demonstrate that EPA guidance does not need to be incorporated into this RI/FS Work Plan. Monsanto and their contractor, Golder Associates Inc., must specifically apply the guidance to this site. A description of how the FS tasks are actually going to be developed and evaluated for this site must be provided.**
Response	Accepted. Further details found in the EPA RI/FS guidance document, as requested in Initial Comments 62, 66, 68, 70, and 71, will be incorporated into the next version of the work plan.
Comment 72	**Adequate response given.**
Response	Acknowledged.
Comment 73	**The general comments regarding the schedule presented in the June 10th letter were not answered adequately. This is a fundamental issue for delineating data gaps that should be addressed as early in the process as practical.**
Response	Accepted. The schedule has been compressed approximately 10 months by arranging project phases such that they occur in a more overlapping manner, to the extent practicable and to the extent consistent with the EPA-10 estimated 16 month cumulative review duration.
Comment 74	**Adequate response given.**
Response	Acknowledged.
Comment 75	**The statement that sufficient understanding exists to allow a qualitative distinction between major and minor pathways as expressed in Figure 17 has not been demonstrated with respect to soils/dusts pathways. See comment # 28 for modifications to the figure.**
Response	Accepted. See the response to Initial Comment 28.
Comment 76	**Adequate response given.**
Response	Acknowledged.
Comment QA1	**Adequate response given.**
Response	Acknowledged.
Comment QA2	**Must have lab QA plan on file.**

Response	Accepted. The laboratories's general QA plans have been forwarded to EPA-10. However, please note that each laboratory will be required, in accordance with EPA guidelines, to work to the project-specific plan appended to the work plan.
Comment QA3	**Alternative analytical methods must be identified to achieve the desired detection limits.**
Response	Accepted as modified in EPA-10's letter of September 25.
Comments QA – QA7	**Adequate response given.**
Response	Acknowledged.
Comments HS1 – HS3	**Adequate response given.**
Response	Acknowledged.

RESPONSE TO SPECIFIC EPA COMMENTS, RECEIVED SEPTEMBER 18, 1991,
ON THE PHASE I RI/FS WORK PLAN
FOR THE MONSANTO COMPANY SODA SPRINGS ELEMENTAL PHOSPHORUS PLANT

Comment 1

Section 1.3, page 5, 3rd paragraph. The last sentence should state that there are three appendices, including Appendix C - Monsanto Water Quality Data Base.

Response

Accepted. Reference, in Section 1.3, will be made to Appendix C as noted.

Comment 2

Section 2.1, page 7. The sentence stating "No pertinent water quality criteria have ever been exceeded in either of these springs.", should include a reference citation.

Response

Accepted. A personal communication with an appropriate city official will be included in the next version of the work plan, along with a reference to Appendix C.

Comment 3

Section 3.2.2, page 17, 1st paragraph. It is stated that "...no evidence of soil quality impacts was found." Severson and Gough concluded that the non-uniformity of the soils at the sampling locations around Soda Springs obscured confident relationships between soil-element content and emissions from phosphate processing. This indicates a need to clarify the obscurity to determine if exposure via soil pathways may be of significance. Also refer to comment # 42 above.

Response

Accepted. See the response to Initial Comment 42.

Comment 4

Section 3.3.1, page 20. The statement that "No adverse environmental impacts could be found to be attributed to the Monsanto discharge.", should be supported by a reference citation. The conclusion from Grothe (1980) was that a 96-hour LC_{50} value could not be calculated since fathead minnow mortality was not observed in the 100% effluent.

Response

The statement in question will be modified to read: "Based on a review of existing data, no adverse environmental impacts could be found to be attributed to the Monsanto non-contact cooling water discharge to Soda Creek."

Comment 5-1

Section 3.3.2, page 21, 1st paragraph. It is mentioned that the conceptual model hypotheses will be tested and refined in an iterative manner. The generalized task objectives and activities of compiling and evaluating all data do not clearly outline an approach as to which exposure pathway model components will be tested and how. Specific objectives and activities must be included to adequately assess the exposure pathways model.

Response — Accepted. Exposure pathway assessment is an element of the baseline risk assessment, and it is our understanding that EPA is to undertake this task. We will make general reference to EPA's risk assessment task within Sections 4.2, 6.1, and 7.1 to remind readers of this particular provision of the consent order.

Comment 5-2 — **In the third paragraph of this Section, a sentence similar to the following should be added at the end: "However, conformational activities are included within this work plan (Sections XXX)."**

Response — Accepted. The parenthetical statement will be added as requested.

Comment 5-3 — **In reference to the last sentence in this Section on page 22, a risk assessment does not decide whether risks are unacceptable or not, but rather determines whether there are potential adverse effects to human health or the environment.**

Response — Accepted. The text will be so modified. However, please note that in the past, EPA-10 has requested use of the concept of acceptability, as this is terminology currently used in the NCP [40 CFR § 300.430(d)(4) and (e)(2)(i)(A)(*1*) and (2)].

Comment 6 — **Section 3.4, page 24, 4th bullet item. Historical stack emission data must also be compiled and reviewed to assess the nature and extent of past potential contaminant releases on the various media.**

Response — Accepted. See the response to Initial Comment 2. In addition, Monsanto will provide EPA with a copy of the air laboratory's general quality assurance plan per EPA's request (T. Brincefield, EPA-10 [Letter to R. Geddes, Monsanto Chemical Co.] September 25, 1991).

Comment 7 — **Section 6.1.2.1, page 32. The area proposed for geological mapping should include portions of sections 28 through 33 in T8S R42E, and sections 5, 6, and 8 in T9S R42E.**

Response — Accepted. The additional sections requested will be incorporated into the geological data compilation activity (Sub-subsection 6.1.2.1).

Comment 8-1 — **Section 6.1.4.2, page 34. The statement "Other than the surface soil samples discussed above..." is confusing since such discussion does not exist. This section should also describe how existing soil data will refine the current conceptual exposure pathways model.**

Response — Accepted. See the response to Initial Comment 42.

Comment 8-2 **Task 4 indicates that literature searches are going to be accomplished but fails to discuss any additional soil sampling needs that may be identified as a result of such a search. While a search of the literature may provide some information, the data presented thus far in the RI/FS Work Plan does not indicate that the surface soils in and around the site have been adequately characterized for the purposes of determining potential sources of fugitive dust contaminants.**

Response Accepted. See the response to Initial Comment 42.

Comment 9 **Section 6.1.5.2, page 35. Provide a description of the types of surface soil data (collected in Activity 4) that will be used in conjunction with available meteorological data. In addition, please provide an initial list of subsequent RI/FS activities that this particular activity may support.**

Response Accepted. We will utilize the EPA wind erosion evaluation method as set forth in the Superfund Exposure Assessment Manual (SEAM). In addition, the activity objective description will be expanded to reference other tasks that may utilize meteorological information.

Comment 10 **Section 6.1.6.1, page 36. Describe specific objectives for collecting and compiling data from information sources (i.e., provide a plan for utilizing ecological data to refine the exposure pathways model).**

Response Accepted. See the response to Initial Comment 52.

Comment 11 **Section 6.1.6.2, page 36. The purpose of this activity should be to conduct a general field reconnaissance to identify and/or confirm habitats that may be considered sensitive within a two kilometer radius of the facility. This would minimize interpretations of "sensitive habitat" and would provide greater resolution for identifying habitats that may not have been delineated from literature reviews.**

Response Accepted. The objective of the field habitat reconnaissance (Sub-subsection 6.1.6.2) will be modified in accordance with the recommendation.

Comment 12-1 **Section 6.1.8.2, page 39. Provide a rationale why other potential source areas are not sampled. At a minimum, the slag pile should also be sampled unless existing slag chemistry data for the constituents listed in Table 3 are available.**

Response — Accepted. Provisions for possibly sampling the slag pile in three locations will be made.

Comment 12-2 — **The particular size distribution must include the ±200 mesh fractions.**

Response — Accepted. Standard particle size analysis will be conducted. In addition, for wind erosion analysis in accordance with SEAM, a dry sieve analysis at the 0.84 mm size must be conducted.

Comment 13 — **Section 6.1.9, page 40. Insert "identify and" in front of the word "verify" because the chemical and location-specific ARARs listed in this work plan are only preliminary.**

Response — Accepted. The name of the task will be modified to include identification.

Comment 14 — **Section 6.3, page 44. The two deliverable documents must contain a section that identifies data needs and a recommendation section for Phase II activities. This will then provide a basis for developing Phase II of the RI/FS.**

Response — Accepted. Reference to the important function of reevaluation of data needs, will be made in regard to both documents.

Comment 15 — **Based upon a review of the detected concentrations of beryllium and lead in ground water (from data in Appendix C), several of the concentrations exceed risk-based levels. Even though beryllium and lead usually are not associated with elemental phosphate production, they must be included in the sampling and analysis program to further delineate their presence. See also comment #32 above. Consequently Table 3 and Table 7-1 of the QAPP need revision.**

Response — Accepted. Lead will be added as a constituent of potential concern, and the work plan and QAPP modified appropriately.

Comment 16 — **Table 7-2 of the QAPP must be revised to include the constituents of Table 3 (excepting radionuclides). This would be consistent with the sediment sampling task under Section 6.1.3.2, Activity 3b.**

Response — Accepted. Table 7-2 will be so modified; however, in accordance with agreements made in the October 2 meeting, uranium will also be included in the list.

Comment 17 **Also under 6.1.3.2., sediment sampling is discussed, but the Technical Procedure Appendix for sediment sampling is not included in the work plan.**

Response Accepted. The sediment sampling procedure will be incorporated into the QAPP as requested.

Comment 18 **Current Existing Data (Appendix C) Because there is the possibility that data from this appendix may be used for decisions purposes for this RI/FS, the quality of the data intended for use needs to be documented. If an independent third party validation of this data set has already been completed, then the data qualifiers that were applied need to be incorporated into the appendix. If such a validation has not been performed, then the data set should be labeled as "non-validated data" and should also be considered as a preliminary data set for decision making purposes. Also, in the event that this entire data set has not been validated, the data presented to EPA that is either intended to be incorporated into the RI/FS report and/or used for decision making purposes for this RI/FS must then be go through a third party independent validation.**

Response Accepted. See the response to Initial Comment 2.

Comment 19 **Cations Calcium and magnesium were only used as examples of cations to measure and were not intended to represent the complete list of cations in the previous comments. The workplan should be revised to include measurement of sodium and potassium as well as calcium and magnesium to determine cation concentrations in the groundwater for the RI/FS.**

Response Please note that sodium and potassium will be analyzed for during the RI: both cations are already identified as constituents of potential concern in Table 3 of the work plan; in addition, analytical methods for these substances are specified in Tables 7-1 and 7-2 of the QAPP.

Comment 20 **Schedule (figure 20) The schedule of sampling events for this project is still not specific enough to allow for EPA or it's oversight contractor to coordinate split sampling activities. A weekly schedule of points to be sampled needs to be provided in order to facilitate such oversight ont he part of EPA.**

Response Accepted. A more detailed, weekly schedule will be provided to EPA-10 prior to sampling in accordance with the notification provision of the consent order.

Comment QA1

Laboratory QA Plans Much of the information regarding the integrity of the samples and the quality of data (internal to the laboratories) has been referenced to each laboratory's respectively approved laboratory QA plans (sections 5 and 6) and yet these plans still have not been provided to EPA. These plans must be provided to EPA in order to complete the documentation of the integrity of the data generation practices as well as the quality of data that is generated by these subcontracted PRP labs.

Response

Accepted. Chen-Northern's general quality assurance plan will be forwarded to EPA; however, Chen-Northern will implement all analytical work per the requirements of the QAPP presented as Appendix A of the work plan in accordance with published EPA guidelines. The intent is to have one controlling procedures document for the project. In addition, all text in the work plan and in the QAPP that incorrectly refer to the laboratory generating a separate QAPP will be deleted.

Comment QA2

Table 7-1 (page 15 of 28) The detection limits in this table are not EPA Contract Laboratory Program Contract Required Detection Limits (CLP CRDLs) but appear to be laboratory specific (or an average of several laboratories) detection limits (see footnote 1 of this table).

Response

Accepted. Unless we can provide a supporting reference for the numbers in question, we will replace them with EPA CLP CRQLs.